

## Marine Corps Air Station (MCAS) Beaufort Beaufort, South Carolina Drinking Water Sampling for PFAS



#### November 2022

# The Navy and Marine Corps are requesting permission to sample drinking water obtained from wells within a sampling area near MCAS Beaufort for certain per- and polyfluoroalkyl substances, commonly known as PFAS.

PFAS are a family of thousands of different chemicals which have been widely used in many household and industrial products since the 1950s. The Navy and Marine Corps developed a proactive policy to address past releases of PFAS at installations nationwide, as several PFAS are of emerging public health concern.

The most common activity associated with the historical release of PFAS to the environment at MCAS Beaufort (Figure 1) is the use of firefighting foam (specifically aqueous film-forming foam, or AFFF) for testing, training, firefighting, and life-saving emergency responses. Because of this historical use, PFAS are present in the groundwater on-base, and they may also be present in nearby off-base drinking water wells located in the direction that groundwater flows away from the base.

In 2020, a Basewide PFAS Preliminary Assessment (PA) was completed, which identified known and potential PFAS release areas. The Basewide Site Inspection (SI) of the known and potential PFAS release areas identified in the PA began in 2021. Samples collected during the SI confirmed releases of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) to groundwater at several areas on MCAS Beaufort. As a result, and in accordance with Navy Policy, a sampling area has been established 1 mile in the direction that groundwater likely flows away from these PFAS release areas (Figure 2).

Records indicate that drinking water for the majority of properties within the sampling area is provided by the Beaufort-Jasper Water & Sewer Authority (BJWSA); however, some properties within the sampling area may use a private well for their drinking water. The Navy and Marine Corps would like to sample these drinking water wells to determine whether PFOA and/or PFOS are above 70 parts per trillion (ppt) in these drinking water wells.

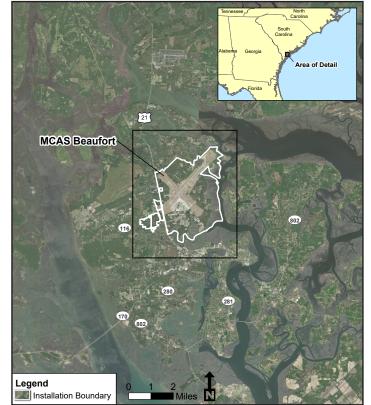


Figure 1- MCAS Beaufort

There is no legal requirement to conduct this drinking water testing. We are conducting the sampling in collaboration with partners such as South Carolina Department of Health and Environmental Control and the Agency for Toxic Substances and Disease Registry (ATSDR).

## **PFAS**

PFAS have been used in many household and industrial products because of their stain- and water-repellent properties. PFAS are now present virtually everywhere in the world because of the large amounts that have been manufactured and used.

The Navy will provide bottled water for drinking and cooking to any property owner or tenant in the sampling area whose well contains drinking water with PFOA and/or PFOS above 70 ppt. The Navy will provide bottled water until a long-term solution is implemented.

Once these compounds are released, many of them tend to stay in the environment for a very long time. Several PFAS are chemicals of emerging concern. Although the United States Environmental Protection Agency (EPA) has started the process to establish regulatory levels for several PFAS in drinking water, there are currently no Safe Drinking Water Act regulatory standards. The EPA has developed drinking water health advisories for a small number of PFAS; these advisories are non-enforceable and non-regulatory. These advisories provide technical information to states and other public health officials on health effects, analytical methodologies, and treatment technologies. More information about EPA's actions for PFAS in drinking water is online at: https://www.epa.gov/ sdwa/and-polyfluoroalkyl-substances-pfas.

### NAVY POLICY

The EPA issued lifetime drinking water health advisories for PFOA and PFOS in May 2016. These health advisories recommended that concentrations of PFOA and PFOS, whether individual or combined, in drinking water should not be above 70 ppt. In response, the Navy and Marine Corps proactively developed a policy in June 2016 to conduct investigations at installations where there has been a known or suspected release of PFAS to the environment. The first priority with these investigations is to ensure that concentrations of PFOA and/or PFOS, whether individual or combined, in drinking water are not above 70 ppt as a result of a Navy or Marine Corps PFAS release.

In June 2022, the EPA issued new, interim drinking water health advisories for PFOA and PFOS. Because these interim health advisories are below detectable limits and are non-regulatory levels, the Navy and Marine Corps are instead looking to EPA to propose a regulatory drinking water standard, which is anticipated by the end of this year. The Navy and Marine Corps are currently evaluating our efforts to address PFAS in drinking water, and what actions

## FOR MORE INFORMATION ABOUT THE OFF-BASE DRINKING WATER SAMPLING

https://go.usa.gov/xJgYA

## **IF YOU HAVE QUESTIONS**

MCAS Beaufort Public Affairs Office 800-818-8455 or BFRT\_JPAO@usmc.mil we can take to be prepared to incorporate this standard. The Navy and Marine Corps will coordinate with the Department of Defense to develop a consistent approach, to include proactive engagement with communities and the appropriate Congressional delegations.

## ACTIONS BASED ON RESULTS

Preliminary drinking water sample results are typically received from the laboratory within 30 days after the samples are collected, and final laboratory reports are typically available within 3 months. Property owners and tenants will be called to notify them of their preliminary drinking water sample results. Final drinking water sample results will be mailed to property owners and tenants. Property information will be kept confidential to the extent permitted by law. For transparency with the public, final drinking water sampling results are also available online at: https://denix.osd.mil/dod-pfas/section-345-data-search/section-345-data-reporting. Individual drinking water sample results cannot be linked with the sampled property on this website.

The Navy and Marine Corps will provide bottled water for drinking and cooking to any property owner or tenant in the sampling area whose drinking water well contains PFOA and/or PFOS above 70 ppt and will continue to provide bottled water until a permanent solution is implemented.

The Navy and Marine Corps will continue to investigate the presence of PFAS on MCAS Beaufort and evaluate if actions are needed on base. The public can find out more about all on-base environmental investigations, including those for PFAS, by visiting https://go.usa.gov/xSvF9.

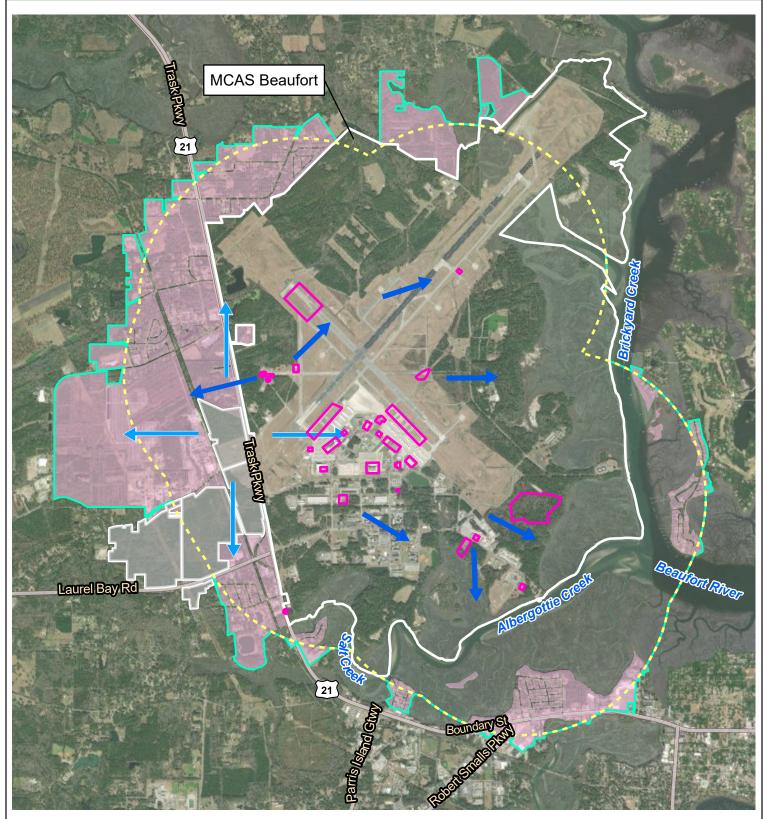
## **HEALTH INFORMATION**

Studies on PFOA and PFOS have found both compounds in the blood samples of the general population. Research to better understand health effects from exposure to low levels of PFOA, PFOS, and other PFAS is ongoing. Federal agencies such as the ATSDR and the EPA continue to conduct and support research into health effects associated with PFAS exposure. More information about health effects can be found online at:

ATSDR: https://www.atsdr.cdc.gov/pfas/index.html

EPA: https://www.epa.gov/pfas

## MCAS Beaufort Drinking Water Sampling for PFAS



#### Legend

PFAS Release Area

Installation Boundary

Property Owned by MCAS Beaufort

- Figure 2 Sampling Area
- 1-Mile from PFAS Release Areas

Approximate Groundwater Flow Direction in the Floridan Aquifer Approximate Groundwater Flow Direction in the Surficial Aquifer Sampling Area 0 0.5 Miles

Note: To be protective, all properties that have any part of the property touching the sample area boundary have been included as properties within the sampling area.